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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,880	10/30/2003	Richard Gill Bonner	71636	9097

7590 08/25/2006

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EXAMINER

BOYKIN, TERRESSA M

ART UNIT PAPER NUMBER

1711

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/696,880

Applicant(s)

BONNER ET AL.

Examiner

Terressa M. Boykin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6-21-6</u> . | 6) <input type="checkbox"/> Other: _____ |

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35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1- 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 5762851 see abstract, cols. 1-6, examples 1-6, claims.

USP 5762851 discloses a method of producing polycarbonate pellets which can be produced by a conventional methods such as solid state polymerization process. The process includes a method for producing a polycarbonate pellet which comprises subjecting a melt-extruded polycarbonate to cooling and cutting in this or reverse order or simultaneously, the improvement in which the cooling is performed using cooling water having an electric conductivity of 1 mS/cm or less as measured at 25.degree. C. The reference also discloses that the cooling water remaining on the surface of the polycarbonate is removed.

Since polycarbonates are infact aromatic polyester carbonates it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the method for preparation of polyethylene terephthalate pellets since they would be structurally analogous.

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With regard to claims 1-2 and 12 and 15 **USP 5762851** discloses polycarbonate pellets produced via solid state polymerization wherein the pellets are cooled. The cooling water has a temperature in the range of from 40.degree. C. to lower than 100.degree. C. The method for cooling the molten polycarbonate with cooling water is not particularly limited as long as the molten polycarbonate and cooling water are contacted with each other to solidify the molten polycarbonate. Examples of methods for cooling the molten polycarbonate with cooling water include a cooling method in which a molten resin is extruded directly into water through a die which is disposed in water, and a cooling method in which a molten resin is first extruded into the air or an inert gas through a die which is disposed in the air or an inert gas, and the melt-extruded resin is then cooled by placing it in water or pouring or spraying water thereon.

With regard to claim 3 regarding the directing pellets exiting ...reactor into a moving stream of water, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the use of stream water to further pelletize, i.e. solidify the pellets since such is vastly known in the art.

With regard to claims 4, 5, 6, 8, 13 and 14 with respect to the use of a mechanical dryer or a fluidized bed, and drying process as well as with regard to the timing or sequence of the drying method as noted in claim 6, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a mechanical dryer since this would be design choice and up to the skilled artisan requiring no further ingenuity.

With regard to claims 7, the reference is absent a showing of adding

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additional heat and thus it would have been obvious to one having ordinary skill in the art at the time the invention was made that external heat was not required.

With regard to claim 9 ,10 and 11 the continuous circulating or recirculating is well-known in the art. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a method of recirculating since this would have been an obvious design choice.

Since polycarbonates are infact polyesters , i.e. polyesters of carbonic acid and as such one would in fact explore similar processing methods thereto. Secondly, one of ordinary skill in the art would have known to employ cooling or additional or continued cooling methods upon the *exiting of the solid state polymerization reactor* where needed is not convincing. There is no unobvious result that applicants have set forth showing why this would be unobvious. The application of cooling any article "in general" after the exiting of a "reactor" or "facility" in need thereof is known in and outside of the art and thus of no patentable ingenuity.

Consequently, in view of the above, the claimed invention cannot be deemed as unobviousness and accordingly is unpatentable.

Correspondence

Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public

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Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is (**571-272-1700**).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tmb


Examiner Terressa Boykin
TERRESSA M. BOYKIN
PRIMARY EXAMINER

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